WHAT IS CLAIMED IS:

1.   A method for providing an estimate of effectiveness of a selected weapon against a selected target prior to release of the weapon, said method comprising:

receiving a position uncertainty for a weapon platform;

5   receiving a position uncertainty for a selected target;

determining an ability of the selected weapon to navigate to the selected target; and

estimating an effectiveness of the selected weapon against the selected target utilizing at least one of the weapon platform position uncertainty, the target
10   position uncertainty, the navigation capability of the selected weapon, and a kill radius for the selected weapon.

2.   A method according to Claim 1 further comprising causing a release of the selected weapon based upon the estimated effectiveness.

3.   A method according to Claim 1 wherein estimating an
15   effectiveness of the weapon comprises at least one of estimating a probability of target destruction, estimating a probability of disabling the target, and estimating an amount of collateral damage.

4.   A method according to Claim 1 further comprising presenting the effectiveness estimate to a user.

20   5.   A method according to Claim 4 wherein presenting the effectiveness estimate comprises presenting a user with a GO/NOGO indication with respect to the release of the weapon.

6.   A method according to Claim 5 wherein the GO/NOGO indication is based on a comparison between the effectiveness estimate and a pre-
25   determined probability of success that the weapon will destroy or disable the target.

7.   A method according to Claim 4 wherein presenting the effectiveness estimate comprises presenting a user with a graphical representation of a probable weapon effective kill radius relative to the target.

8.   A method according to Claim 1 wherein receiving a position uncertainty for a weapon platform comprises receiving a platform position and a position uncertainty from an embedded GPS/inertial navigation system.

9.   A method according to Claim 1 wherein receiving a position uncertainty for a selected target further comprises receiving information about the environment in which the target is located.

10.   A method according to Claim 1 wherein receiving a position uncertainty for a selected target further comprises receiving target location information either relative to the weapons platform or an absolute target position.

11.   A method according to Claim 1 wherein receiving a position uncertainty for a selected target comprises bounding a target location with a selected confidence level.

12.   A method according to Claim 1 wherein receiving a position uncertainty for a selected target further comprises receiving a target type.

13.   A method according to Claim 1 further comprising calculating a collateral damage estimate by:

considering all the known items within the region of the target; and

estimating to a specific level of certainty the impact of the weapon to the known items.

14.   A computer program comprising:

a software module for receiving a position uncertainty for a weapon platform;

a software module for receiving a position uncertainty for a selected target;

a software module for determining an ability of a selected weapon to navigate to the selected target; and

a software module for estimating an effectiveness of the selected weapon against the selected target utilizing one or more of the weapon platform position uncertainty, the target position uncertainty, the navigation capability of the selected weapon, and a kill radius for the selected weapon.

15. A computer program according to Claim 14 further comprising a software module for causing a release of the selected weapon based upon the estimated effectiveness.

16. A computer program according to Claim 14 wherein to estimate an effectiveness of the weapon said software module estimates at least one of a probability of target destruction, a probability of disabling the target, and an estimated level of collateral damage.

17. A computer program according to Claim 14 further comprising a software module for receiving information about the environment in which the target is located.

18. A computer program according to Claim 14 further comprising a software module for bounding a target location with a selected confidence level.

19. A computer program according to Claim 14 further comprising a software module for receiving a target type.

20. A weapons system programmed to:

receive a position uncertainty for a weapon platform;

receive a position uncertainty for a selected target;

determine an ability of a selected weapon to navigate to the selected target; and

estimate an effectiveness of the selected weapon against the selected target utilizing one or more of the weapon platform position uncertainty, the target position uncertainty, the navigation capability of the selected weapon, and a kill radius for the selected weapon.

21.   A weapons system according to Claim 20 programmed to cause a release of the selected weapon based upon the estimated effectiveness.

22.   A weapons system according to Claim 20 wherein to estimate an effectiveness of the weapon, said weapons system is programmed to estimate at least one of a probability of target destruction, a probability of disabling the target, and an estimate of collateral damage.

23.   A weapons system according to Claim 20 further comprising a user interface, said weapons system programmed to present the effectiveness estimate to a user on said user interface.

24.   A weapons system according to Claim 23 wherein to present the effectiveness estimate, said system is programmed to display a GO/NOGO indication with respect to the release of the weapon on said user interface.

25.   A weapons system according to Claim 24 programmed to base the GO/NOGO indication on a comparison between the effectiveness estimate and a pre-determined probability of success that the weapon will destroy or disable the target.

26.   A weapons system according to Claim 23 wherein said system is programmed to present the effectiveness estimate on said user interface as a graphical representation of a probable weapon effective kill radius relative to the target.

27. A weapons system according to Claim 20 wherein to receive a position uncertainty for a weapon platform, said system is programmed to receive a platform position and a position uncertainty from an embedded GPS/inertial navigation system.

28. A weapons system according to Claim 20 wherein to receive a position uncertainty for a selected target, said system is programmed to receive information about the environment in which the target is located.

29. A weapons system according to Claim 20 wherein to receive a position uncertainty for a selected target, said system is programmed to receive target location information either relative to the weapons platform or as an absolute target position.

30. A weapons system according to Claim 20 wherein to receive a position uncertainty for a selected target, said system is programmed to bound a target location with a selected confidence level.

31. A weapons system according to Claim 20 wherein to receive a position uncertainty for a selected target, said system is programmed to receive a target type.

32. A weapons system according to Claim 20 programmed to calculate a collateral damage estimate by:

considering all the known items within the region of the target; and

estimating to a specific level of certainty the impact of the weapon to the known items.